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# BULBS FOR POTS

AND FALL PLANTING IN THE GARDEN



A CATALOG OF THE BULBS AND PLANTS OF THE AMARYLLIS, IRIS,  
ORCHID, GESNERIA AND OTHER PLANT FAMILIES  
AND MANUAL OF THEIR CULTURE

AFRICAN VIOLETS

Many Reduced Prices. New Items Listed. Culture Directions.  
A Personal Letter,—to You.

FALL 1960



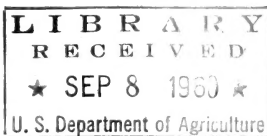
CECIL HOUDYSHELE

1412 Third St.

La Verne, Calif.



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## A Personal Letter—To You:

Dear Floral Friends:

Here is a good motto from Ellan Wheeler Wilcox (1855-1919):

"Laugh and the world laughs with you  
Weep and you weep alone;  
For the sad old Earth  
Must borrow its mirth  
But has grief enough of its own.

It is surely true that smiles win friends and keep them as well. It is also a good business policy but should come from the heart, not forced from any desire for money.



**Cecil Houdyshel**

A garden is a lovesome thing

God wot  
Rose plot  
Ferned grot  
The veriest school of Peace;  
And yet the fool contends that God is not  
Not God! In gardens when the eve is cool?  
'Tis sure that God walks in mine.

From "My Garden" by Thomas Edward Bacon.

We have many Camellias—both identified varieties and seedlings. This fall we could spare some seed for 15c each or two for 25c, postpaid.

These would not be identified as to the species or varieties. Seed should be planted in cans or pots of a mixture of sand and peat and good drainage at bottom.

They must be grown on for several years—4 or 5 at

least before one can expect flowers but the foliage alone is beautiful. If cans are kept in a warm room (we keep our own in a greenhouse), one can expect more rapid growth than if grown outside.

Camellias are unusual. The word is both a common name and a botanical name. They belong to the Tea family. Camellias bloom in their dormant season.

Those of you who live near us are **invited to come and visit us**. From Los Angeles take San Bernardino Freeway to Ganesha turnoff (Los Angeles Fair) to the Fair Grounds, left to the first street (E), right to Third Street, left to 1412 Third Street. From the east turn off freeway at Towne, right to La Verne Road (a short block), left to Lincoln, right to Third Street, left to our place.

Write to Mrs. Houdyshel for information on lectures on African Violets and Rare Bulbs with slides. She also has slides to rent to distant clubs.

We have selected some of the finest Dutch hybrid Amaryllis we have ever had for your pleasure this fall. These have been especially prepared for early flowers. Be sure and see our list of other Amaryllids for your window and garden.

Oh that they're possible  
After long grief and pain  
To find the arms of my true love  
Round me again.  
A shadow flits before me  
Not thou, but like to thee  
Ah Christ! That it were possible  
For one short hour to see  
The souls we loved, that they might tell us  
What and where we be.

Lord Tennyson, born 1809, died 1891.

Sincerely,

CECIL HOUDYSHEL

## TERMS AND INSTRUCTIONS FOR ORDERING

**Prices** in this catalog cancel all former prices. They are for one bulb unless otherwise stated. 12 bulbs are sold for price of 10 or 6 for price of 5. 100 bulbs for price of 70 unless noted. Books, garden supplies and plants take no quantity discounts. California customers must add 4% Sales Tax.

**Remit** in advance, in full, by check or M.O. No C.O.D. No charge accounts carried. Nothing reserved unless paid for in full. These terms reduce our expenses and lower the costs to you. 1, 2 or 3 cent stamps are accepted for small sums—under \$1.00.

**Postal rates.** Please include 50c to help pay postage and packing unless otherwise stated. If wanted by air mail we charge the customer the cost. Estimate this and state you will promptly pay the difference if not enough.

**Insurance** up to \$10.00, 10c. \$10.00 to \$50.00, 20c. Postal insurance covers all except freezing in transit. **Special Handling** costs 25c up to 2 lbs.; 2 to 10 lbs., 35c. **Special Delivery** is better as it also speeds delivery and is handled more carefully. We are not responsible if plants are not immediately taken indoors. Up to 2 lbs. costs 45c. 2 to 10 lbs., 55c. Over 10 lbs., 70c. Each fee is for one package only.

**Wholesale.** There are several items we can supply wholesale. Send your want list and we will quote our best quantity prices. We can quote African Violets. Dealers only.

**Partial Shipments** are made if bulbs are not all dormant at same time. We deliver everything within the season for correct planting. We must collect from you the fees for Insurance, Special Handling, Special Delivery.

**We guarantee** our bulbs to be true to name and healthy and replace them if not. If you follow our directions in Spring Catalog they will grow and flower. If you do not have our Spring Catalog send 10c and we will send you one.

**Catalogs.** Spring Catalog mailed Jan. 1; Fall Catalog, Aug. 15, or soon after.

### General Culture Directions

Rich sandy loam is the best soil. But if too sandy, it may lack fertility. It will require more rainfall or irrigation. The ideal garden soil will contain sand, clay and humus.

All soils require the addition of much humus. Compost all garbage, weeds, leaves, cut branches and manures. When rotted, add to soil and thoroly mix.

**Fertilizer.** We recommend only animal manures, compost and commercial fertilizers that are mostly of organic origin such as **Spoonit** and **Blue Whale**, listed in this catalog. In the outside garden fresh manure can be used on most plants that are growing vigorously as a very light mulch, but after flowering. Too much fertilizer before flowering may almost or wholly stop the flowers. When the growth of a plant becomes abnormally rapid it is unlikely to flower or produce fruits.

Do not fertilize a plant in dry soil, or use manure (unless thoroly rotted in a compost heap) in the soil before planting bulbs, seeds or plants. Water lawns, trees, and plants well the day before applying fertilizer and again a few days after application. Do not fertilize a sick plant in order to make it well. You are more likely to make it worse or even kill it. Small plants and seedlings should not have too much either. Lush, rapid growth may be weak and "flabby." Sturdy growth with firm structure is better. Little and often is the best rule for fertilizing.

Compare plants with people. Both are living, organic beings. Air, water and food are necessary for their growth and health. But one does not give babies beefsteak, fried potatoes, apple pie and a cup of coffee. Nor is this a good diet for an invalid or an ill person, however good it may be for one in vigorous health who performs hard physical labor. Nor should plants be over-fed or fed at all if sick or thirsty. But since one cannot add much rich food when potting a bulb, very good results may be obtained by a monthly feeding of very weak liquid manure, color of very weak tea. A more convenient way is to use Spoonit, which we list under Garden Supplies.

**After blooming,** many neglect their bulbs. As a result the bulbs do not flower the

following year. For success one must continue to give good culture. This is the time to fertilize, irrigate and cultivate frequently, until yellowing foliage indicates the bulb is becoming dormant. During this growth period next year's flower buds are formed.

**Depth of planting and distance apart** often cause too much concern. Bulbs usually have sufficient adaptability to do well under widely varying conditions. If left in one place a few years, most bulbs adjust themselves to their preferred depth. Approximately, bulbs should be about 2 or 3 times their diameter apart unless their habit of growth is spreading—like *Ranunculus*. In such cases plant farther apart. Bulbs as large as Daffodils may be 4" to 6" deep. Bulbs with a heavy erect stem need deep planting in order to remain erect. Plant deeper in light sandy soil than in heavy soils and in cold climates to protect them from frost. A winter mulch will help protect.

**Pests.** Snails, slugs, ants, mealy bugs, thrips, aphids, leaf hoppers, mites, red spider and scale are among the most serious pests in the garden or on house and greenhouse plants. They must be controlled. See our listing of **Insecticides under Garden Supplies.**

**Acid and Alkaline Soils.** Most plants thrive in mildly acid, neutral or mildly alkaline soils. But others do not have so wide a range of tolerance. Rhododendrons, Azaleas, Camellias, Gardenias, Zantedeschias, Caladiums (and other members of Arum family), Nerines, Haemanthus, Gloxinias, Begonias, Orchids and most shade loving plants require an acid soil. Some like *Gladiolus* prefer mildly acid to neutral soils; Bearded Iris do best in neutral to alkaline soils. The acid-alkali balance depends upon the concentration of hydrogen ions in a saturated solution. This is expressed in pH units. pH7 is neutral. Below that the acidity increases; above it the alkalinity increases. For the mathematical, I will explain that the numeral is the negative logarithm denoting the concentration of hydrogen ions in gram atoms per liter.

In regions having heavy rainfall, excess alkali is usually dissolved and carried away by the runoff. Semi-arid regions usually have alkaline soils. Calif. soils usually have too much unless cover crops or applications of humus, which are acid, have lowered the pH. Some Texas soils are too alkaline. The remedy is obvious. Apply humus, ground phosphate rock, or small, even applications of sulphur. Improve the drainage.

**Chlorosis** of plants, indicated by lighter green streaks of foliage, may not be due to a virus disease, in all cases. It may indicate lack of all required nutrients, some of which cannot go into solution in an alkaline medium. Among such nutrients are Nitrogen and Iron which are soluble only in acids. Mild acidity is usually best. Iron Chelate in minute quantities often corrects chlorosis. Be careful. It burns if too strong. Iron Chelate is now added to Spoonit.

**Potting Directions.** Use clean pots of the right size, neither too large nor too small. A 2½" *Amaryllis*, for example, needs a 6" pot. A 1½" *Eucharis* needs a 5" pot. Small bulbs like *Ranunculus* or *Achimenes* may have 3 to 5 in a 5" or 6" pot. Cover the hole at bottom with a piece of broken pot, concave side down. Above this place a handful of sphagnum moss to prevent the soil from sifting into and clogging the drainage material.

The drainage must be perfect and it is essential that the soil above this drainage be of a friable texture that permits water to pass thru freely. Only sandy soil will answer this purpose. Add enough sand so that it feels very gritty. The potting soil we like best is about 2 parts of peat or leaf mould and 1 of sand. If peat is used a little woods earth or pure rotted leaves and twigs may be added. Plain dirt, especially if clay is present, or any mixture that becomes lumpy when dry is likely to produce poor results. Mulch surface with wet sphagnum to prevent erosion when watering and too rapid drying at surface. Special directions are given for certain plants with the listing.

## GARDEN REFERENCE BOOKS

**Bailey's Cyclopedia of Horticulture.** This 3-vol. set of over 3,600 pages describes almost every cultivated plant and has a wealth of culture information. Price \$52.00.

**Hortus Second (Bailey).** A concise Dictionary of Gardening. This 778-page volume

lists and describes nearly every plant offered in catalogs, and some that are not in the *Cyclopedia of Hort.* It contains a few culture hints. Price \$13.50.

**Amaryllis and How to Grow Them**, by Peggy Schulz. This book was written for amateurs and by a well known amateur. It contains much useful information. 128 pages, many line drawings, photographs and two colored plates. \$2.95.

**Bulbs for Beauty** by Charles H. Mueller. We find we have several of these. First printing. Copyright 1947. \$3.50.

**Bulb Magic In Your Window**. 100 bulbs to grow in your window, from *Achimenes* to *Zephyranthes*. 214 pages. 3 color plates and 42 full page illustrations. Complete growing instructions. \$3.95.

**House Plants for Every Window**, by Dorothy H. Jenkins and Helen Van Pelt Wilson. Formerly *Enjoy Your House Plants*. An up-to-the-minute revision of "the most popular book on house plants ever written." Covers many plants for the window garden. A must for The Window Gardener. \$3.50.

**African Violets, Gloxinias, and their relatives**. A guide to the cultivated *Gesneriads* by Harold E. Moore, Jr. 5 color plates and more than 40 line drawings, illustrating nearly every species described, have been expertly prepared by Marion Ruff Sheehan to help the grower identify his plants. Never before has this ornamental family been so completely and artistically depicted. \$10.00.

**The New Greenhouse Gardening for Everyone**, Ernest Chabot. Important factors are noted, including correct temperatures for forcing plants, bulbs, and orchids. \$4.75.

**How to Grow Rare Greenhouse Plants**. A new book on greenhouse gardening by Ernest Chabot. Complete directions for greenhouse culture of 260 rare plants. Everyone having a greenhouse should have both books. 182 pages. Illustrated. \$4.00.

**Geraniums, Pelargoniums**, by Helen Van Pelt Wilson. 248 pages, 7 color plates, many drawings and illustrations. Best book on this subject. \$4.50.

**Gloxinias, and How to Grow Them**, by Peggy Schulz. Illustrated by colored plates and line drawings. Many *Gloxinia* relatives discussed, 128 pages. \$3.50.

**Growing Plants Under Artificial Lights**, by Peggy Schulz. 146 pages. One color plate and many illustrations. \$3.50.

**Tuberous Begonias**, by Worth Brown. Mr. Brown is one of our most important hybridizers and wholesale growers. His book is a complete guide for the successful growing and propagation, outdoors or as house plants. 128 pages, illustrated. \$3.50.

**The Complete Book of African Violets**, by Helen Van Pelt Wilson. This is completely new and gives best information on hundreds of varieties. 29 *Saintpaulias* are shown in full color. 256 pages, fully illustrated. \$3.95.

**How to Grow African Violets**, by Carolyn Rector. 62 pages, paper-board covers. Illustrated. How to grow from seed, prepare potting soils, pollinate and hybridize, control pests, diseases, groom plants for show and grow from leaf cuttings. \$1.50.

**The Little Bulbs**, by Elizabeth Lawrence. Learn the charm of growing little bulbs. Miss Lawrence is a dedicated gardener. She won the Herbert Medal for her book "A Southern Garden" in 1943. \$4.00.

**How to Grow Orchids**, by Cecil Houdyshel. This booklet has recently been revised and is now 12 pages (formerly only 10 pages). Price 50c.

**Amaryllis Manual**, by Hamilton P. Traub. Dr. Traub, editor of *Plant Life*, has long been regarded as a world authority on the botany and cultivation of the *Amaryllis*. Culture, ornamental uses, and many forms of the species are treated in detail in this first complete and scientific work. Accompanying appendices provide the botanist with all the information he requires for a thorough knowledge of this important group of flowers. Illustrated. \$7.50.

**Camellia Culture**, edited by E. C. Tourje. A compendium of the latest scientific practices described from their own experience by 55 of the country's leading research workers.

and Camellia growers. The most comprehensive volume available on the culture of this favorite flowering shrub. Photographs and line drawings in abundance. 484 pages. \$11.50.

### Garden Supplies

**Postage Extra** is necessary on several items below. The weight when packed is given on these items. It is clearly stated that you must send the postage when you order. Here is how to find it. We are very near Los Angeles. Call your P.O. and ask the cost of postage on the packed weight given from your P.O. to Los Angeles and send us that amount. Orchids that are shipped in pots or baskets are sent by express f.o.b. The minimum cost is \$2.36.

**Isotox.** Improved Isotox Garden Spray M. For African Violets use 1 teaspoon to one gallon of water. Mix well. \$1.19 for 4 oz. bottle. By mail add 20c for postage and packing, plus 5c Sales Tax in California.

We assume no risk for results with insecticides. Read instructions carefully.

**Spoonit** is the fertilizer we use on African Violets and on all house plants. **Analysis:** nitrogen, 18%; phosphoric acid, 20%; potash, 16%; chelated iron. To use, dissolve level tablespoonful in 1 gallon water or level teaspoonful in quart. Apply every 3 or 4 weeks. Transplants half strength. It never burns. **Prices:** 6 oz. package 60c plus 11c postage. 15 oz. pkg., \$1.25, plus postage on 1 lb. (See paragraph 1 above.) 2½ lb. pkg., \$2.50 plus postage on 3 lbs. Try the new **Orchid Spoonit**, 1 lb. \$1.25 plus postage on two lbs. **Spoonit** can now be furnished in a 5 lb. drum for \$4.50, f.o.b.

**Blue Whale.** 12 oz. liquid Blue Whale, \$1.00 postpaid. Sea Rich, Blue Whale Peat Moss, Bantam bag (approximately 10 lbs.) \$3.25 prepaid. Dealers write for prices. We have Blue Whale liquids in several sizes as well as the Peat Moss, at the nursery. No. 2 Bag of Blue Whale \$1.00 postpaid. Dealers contact for wholesale prices.

We recommend the use of both Blue Whale peat and the Liquid Fertilizer. Our potting mix is made up with ½ Compost, ¼ Blue Whale peat, ¼ washed sand, and enough Sponge Rok to give it good drainage.

Write to Lue Hale, The Friendly Gardener, Acme Peat Products of Canada, 687 No. 7 Road, Dept. E, Richmond, B. C., for the African Violet Flyer and for the Foliar Feeding Suggestions.

**Flower Pot Tree Stand,** black, sturdy, with saucers to hold 13 pots. \$8.75. **Table Model,** holds six pots. \$5.00. Brass, \$6.50. Black stand to hold 18 pots \$12.50. Brass \$14.75. For mailing and packing add \$1.25. Add 4% sales tax in Calif.

**Plastic Pots.** Green. 2¼" starter pots 25c doz. \$2.00/100. 3", 50c doz. 100/\$4.00. If larger sizes wanted ask for prices. Add 50c for packing and mailing.

**Osmundine,** best Florida grade, \$2.00 lb. postpaid.

**N.P.I.** A new planter mix. 150 cubic inches, 49c, postage for 2 lbs. 600 cubic inches, \$1.49, postage for 4 lbs. A Nutralite product.

**N. P. I. bio-guard,** a new concept in safe and efficient insect control. It is a living insecticide, harmless to humans and animals but gives a high degree of control over the caterpillars of butterflies and moths. \$2.69 plus tax and postage for 1 lb.

**Sphagnum Moss.** Best we can get. 70c per lb. gross weight. Postage extra, for 1 lb.

**Plant Labels.** The following are plastic labels, easily written upon with pencil. **Pot Labels,** length 4½", 35c doz. Length 3½", 30c doz. Small labels for African Violets, 2" long, 20c doz. 75c for 100. **Orchid Labels.** Perforated on one end, but without wire or cord, 2½", 30c doz. **Aluminum Tree Labels.** Emboss name on label with sharp pencil or ball point pen. Two sheets of Aluminum make this strong and permanent, with wire to tie on, 35c doz. Package of 50, \$1.00 prepaid.

**Wire Baskets.** Our wire baskets are electrically welded, galvanized, non-rusting. The best obtainable. They look better, last longer than painted, soldered baskets and cost but little more. Price, with hangers, 8", \$1.00 ea., \$11/doz. 10", \$1.25 ea., \$13.50/doz. 16", \$2.75 ea., \$25.00/doz., postpaid.

**Snap On Pot Hangers**, for hanging any size pot. Galvanized. 35c ea. Send 10c ea. for postage. \$4.00/doz.

**Baffle Spray Fogger**. For greenhouse, lathhouse or outside. Fits 1/2" pipe. Adjustable fog spray thrown 6 ft. increases humidity, lowers temperature. Price, \$2.10; \$2.20 by mail.

**Rootone** with Fungicide—Stimulates roots, controls soil diseases. Dust seeds, roots of transplants, end of cuttings or base of bulbs for quick rooting, more rapid growth. 2 oz. jar \$1.25.

## CATALOG ARRANGEMENT

is by Plant Families, according to their relationship.

In the following lists the **genus** (plu. genera) is mentioned first. After it, the **species** (plu. also species) or horticultural variety is named. The initial of the genus is used for the second and succeeding species. Thus *A.* will stand for *Amaryllis* or *Agapanthus* depending on the genus last named in full.

### THE AMARYLLIS FAMILY — Amaryllidaceae

This Family includes the following bulbs, *Agapanthus* thru *Zephyranthes*.

Those who grow *Amaryllis* as an interesting and intellectual hobby and who love their vivid beauty, are invited to become members of The American Plant Life Society. The annual dues are \$3.50 per year, which you may send to Thomas W. Whitaker, Executive Secy., Box 150, La Jolla, Calif.

**Agapanthus**, Blue Lily of the Nile. They flower here in June to Aug. In the north they must be grown in large pots or tubs and wintered in a frost free room. Plant in full sun exposure in any good sandy garden soil that drains well.

**Agapanthus longispathus**. Similar to well known *A. orientalis*, but smaller and earlier to flower. Profuse bloomer. For pot growing. 50c, 3 for \$1.25.

**A. orientalis**. Dark blue. Larger than *longispathus*. Superior clone. \$1.00.

**A. orientalis**. Sky Blue. 75c.

**A. von Wellighi hybrids**. Selected clone. A giant type, very large, round umbel of blue flowers on a tall stem. Late flowering, extending the season. \$2.50.

**Alstroemeria seed**. Assorted varieties. Plant as soon as received. Packet 50c.

**Amarcrinum Howardi**. Bigeneric hybrid of *Brunsvigia rosea* and *Crinum moorei*. Beautiful, fragrant, pure pink fls. Fall bloomer. Culture like *Crinums*. Hardy to So. Indiana. Large bulbs, \$2.50. Sm. \$1.25.

**A. Dorothy Hannibal**, a *Les Hannibal* origination. A new introduction. Like *Crinum Cecil Houdyshel* it flowers in all seasons. The flowers are a very pretty pink. New low price, \$4.00.

**Amaryllis** are the easiest, the most showy and popular of all bulbs for growing in pots. Equally desirable for southern gardens where they are hardy along the east coast to N. Car. and on the west to Vancouver. In the middle section they may be grown as far north as Ark. and Okla., but note special directions for colder sections.

**How to Grow Amaryllis**. In the garden, in the deep south where temperatures go only a few degrees under freezing, *Amaryllis* bulbs need to be covered only about an inch or two. Farther north they may be planted deeper in protected places and mulched with straw, leaves and/or brush. In Okla., a customer reports a depth of 4" with mulch is safe. Try our "Hardy Hybrids." *Amaryllis* must not be planted close to trees, shrubs or large vigorous plants, whose roots compete and take the moisture. Irrigate frequently. Rain is seldom enough. The most common error is lack of sufficient moisture. They are endemic to the tropics and in many cases, where there is almost daily rain. The soil should contain much humus. Add well rotted manure and if not slightly acid, add some peat but do not acidify the soil with sulphur or aluminum sulphate. We do not advise planting imported, greenhouse grown bulbs in the outside garden. They seldom do well outside.

**In Pots**. A 2 1/2" bulb requires a 6" pot. Give a 3" to 3 1/2" bulb a 7" pot. Remove

dead roots but every vestige of living root should be left on. Our best success in flowering Amaryllis and in growing them on to larger, better bulbs is in a soil mixture composed of clean, sharp sand one part by volume and a mixture of pure organic material two or three parts. The latter may be pure peat or about half peat and half well broken up or decayed leaf mould, woods earth or completely reduced compost. The final mixture should have enough sand to feel very gritty. Such a mixture drains quickly but retains enough moisture around the roots.

To this mixture we add a tablespoon of bone meal and a level teaspoon of blood meal for each 6" pot. This is enough fertilizer until after bulbs have flowered.

The neck and about  $\frac{1}{2}$  of bulb should be above soil surface. This surface should be  $\frac{1}{2}$ " below pot rim. In potting carefully spread out all living roots as they are a great advantage to bulbs. Such bulbs will start more quickly and may be given a warm temperature at once. If there are few or no living roots on bulbs, set them first in a cool place, about 50°, for roots to form and growth start.

We water at once and again when growth has started. With mixture above advised, one is not likely to over water tho you should be a little careful at first, if the bulb had no living roots. For as long as they will grow, potted Amaryllis need frequent watering. They are not only heavy drinkers but gross feeders. If you give liquid manure or Spoonit every 3 weeks, it will be about right. It is also good to vary the diet. Try Blue Whale.

Amaryllis like the sun. If the foliage fades the sun may be too strong or you may not be watering enough. In the house, give them a sunny window. Keep the bulbs growing vigorously until fall, Oct. or Nov. When outer leaves begin to go down, buds have been formed for next season's flowers and bulbs may be dried off and stored in a cool place. Inspect frequently. For early flowers, dry off about Nov. 1, or earlier.

**A. bifida.** Formerly known as *A. advena*. **Ox-blood Lily.** This is a fall bloomer. Hardy to So. Ind., Ill., Mo., Kansas, etc. There are 5 to 8 dark red fls. in an umbel. Not suitable for pots. Fall special, 35c ea. 3/\$1.00; \$3.50/doz. Smaller blooming size, \$12.50/100.

**Amaryllis Hybrids.** The H & S strain is considered to be the best American strain. Assorted Colors. 90c ea. 3/\$2.50. 6/\$4.75. 12/\$9.50.

**Hardy Hybrids.** These are not hardy outdoors in the colder states but as far north as North Carolina, Washington, D.C., and Oklahoma these have proven winter hardy if covered by 4" of soil and given a good winter mulch of straw.

This is an extremely vigorous, rapid growing and multiplying strain and equally prolific with flowers. There are always a few flowers in the field in the fall. They might give winter flowers in pots. Most of them are similar in color, orange scarlet with white throat and green keel. An ideal strain for outside planting and landscape effects. Their bright vivid color "hits you in the eye." Altho not an exhibition type, many will like them in pots, where they are easier to grow than the more aristocratic hybrids, and their bright cheerful colors will be most welcome. 75c ea., \$7.00/doz. Large, \$1.00; \$10/doz.

**Dutch hybrid Amaryllis.** We have the very best of the Van Meeuwen's Superiors named varieties for you this fall. The bulbs are large, give 3 stems as a rule, nearly all varieties bear 4 flowers on each stem. The wide flowers are flat. These lovely flowers smile at you in their full brightness while you look in their hearts. These are prepared Amaryllis to assure you early flowers.

**Albino.** Pure white, a little green in the throat, large flat flowers. Very free flowering. This variety will please everybody who loves white Amaryllis.

**Faust.** Shiny Dutch vermilion, a little darker in the throat. Very large flat flowers, 3 to 5 flowers per stem. A perfect variety.

**Friendship.** Salmon with a slight orange glow. Bears 4 to 5 flowers per stem. This variety was named in the presence of His Excellency Minister Algera at the same time and place as the sensational new Dutch aeroplane "F 27" Friendship.

**Giant Goliath.** Deep vermilion, enormous flat faced and star shaped flowers, mostly



3 flower stems bearing 4 flowers each. This variety has an amazing ability to reflect light, resulting in a glossy bright sheen. Like Hollywood's term "Super-colossal." This variety caused a traffic mass at the Keukenhof Exhibition, 1958.

**King Gustav VI Adolf.** Bright red. This excellent Amaryllis produces very tall strong stems bearing always 4 enormous flat faced flowers per stem. Needless to say this variety is strongly recommended. It was named in the presence of His Majesty the King of Sweden.

**Queen Superior.** Excellent dark red. Large flat flowers, very free flowering, growing more beautiful each year. No Amaryllis collection is complete without this lovely variety. One of the best.

**Queen of the Pinks.** Beautiful soft Camellia pink, very free flowering. Produces 2 to 3 stems bearing 4 perfectly shaped flowers each. This variety is without any doubt one of the best pink varieties available at the present time.

**Prices** \$7.50 each. All seven, value \$52.50, for \$47.25. Prepaid.

**D. & R. Dutch Hybrid Amaryllis.** 3½" up. **Dark Red, White, Pink, Salmon and Orange.** Order by color please. These are fine hybrids. **Price** \$4.25 each. 6 colors value \$25.50 for \$22.95.

**Wyndham Hayward.** Magnificent dark Oriental red. Fine contour. One of the nearest perfect. \$7.50.

**Seedlings of Dutch Amaryllis.** We have made some crosses and all bulbs are of high quality and equal to imported bulbs. Not all are flowering sizes but most should flower.

**Pink Favorite seedlings, Queen of the Whites or Van Tubergen Pinks.** Small bulbs, \$4.00. One of each for \$10.00.

**Queen's Page, Queen's Page x Algonc, Sweet 17, Violetta, or Striped Superiora,** \$2.50 each. One each of the five for \$10.50.

**Special Price.** One each of the 8 varieties of seedlings for \$19.00.

**A. gracilis.** Species. Fine deep red, miniature form. They bloom every year and are much admired due to their small size and perfect shape. \$7.50.

**A. Lady Grant.** Species. This was brought to California from India in late '20s. Broad leaf, white rib through center of leaf. Only a very few of these. Bulb rather small, may not flower first year. \$10.00.

**A. immaculata.** Species. Usually known as *A. candida*. The long, tubular, lily-shaped flowers are pure white. Deliciously fragrant. \$5.00.

**Brunsvigia rosea.** Familiar in California and the south as Amaryllis belladonna, Naked Lady Lily, etc. It is hardy where minimum winter temperatures are 10° above zero. It will be safe to plant it on the east coast to N. Car. and to Washington, D.C.; thruout the south where winters are mild; on the Pacific Coast to Vancouver. A customer in So. Ind. reports them hardy and flowering. They seldom succeed in pots. We have had reports of good growth but no flowers in Fla., Miss., and La. This So. African does well where there is no heavy rainfall from May 1 to Aug. 1 as here or in its habitat. The flowers are an exquisite pink with a fine fragrance. Aug. and Sept. visitors to So. Calif. take back home the memory of these and want them.

**B. rosea major hybrids,** fine colors. 35c ea. 3/\$1.00. 50c ea. 3/\$1.35.

**B. Hannibal hybrids.** These are fine flowers. 75c ea., 3 for \$2.00, \$7.00 doz.

**B. multiflora Parkeri.** These are darker rose, some being very dark. The most beautiful of all. 50c ea. 3/\$1.35. \$5/doz. Larger bulbs 75c ea. 3/\$2.00.

**Clivias** have evergreen, strap-like foliage somewhat resembling that of Amaryllis. The orange flowers are produced in umbels of 10 to 25 in March and April.

**Culture.** They are usually grown in pots, even in the south, as more perfect foliage is thus possible, and when in flower one wants them in the house. We grow them in a lath house, lath spaced ½" apart, and in garden under Avocado (evergreen) trees,

directly in the soil as they are often grown in Calif. When grown thus they will make very large clumps. They must have shade with only a few flecks of sunshine, but plenty of light and air.

Clivias must never be dried off or allowed to lose their foliage. Keep them well watered after flowering, all summer and fall. Liquid fertilizer occasionally helps. When growth ceases in late fall rest them by giving them less water. But keep moist enough to prevent wilting of foliage. At this time they should have a cool room with temperatures from above 32° to not much over 50°. Pots should be 6" to 8" for small plants and up to 12" for larger. As they grow and increase, do not divide but shift to larger pots. Drainage must be perfect. Potting soil as described under "General Culture Directions." pH 7 is about right. One cannot guarantee a Clivia to flower the first year after moving tho they usually do.

The foliage of our Clivias, grown outside in the ground will not be as perfect as that of pot grown plants. But when potted, they replace the old foliage in a few months and become specimen plants.

**Clivia miniata.** Wide open soft yellow orange fls. \$1.00, \$2.00 and \$2.75. Only the \$2.75 is likely to flower.

**C. cyrtanthiflora.** The flowers are tubular and long, yet they are so numerous that they fill a large umbel and make a beautiful floral display. They are distinctly different from other Clivias also in their time of flowering. There is not a month in the year when we do not sometimes have flowers. Price \$10.00.

**C. European Hybrids.** The large flowers have well rounded petals of red-orange and the wide leaves are ornamental. This is the most desirable of all Clivias. Selected fine large plants, blooming size, \$6.50.

**Crinums.** See Spring Catalog. **Crinum Cecil Houdyshel.** \$1.50, jumbo, \$3.00.

**Eucharis amazonica** (or *Grandiflora*). Eucharist Lily. Star of Bethlehem. First collected on Banks of Rio Magdalena, Colombia, S.A. Thus are combined three Biblical names in the lore of this flower. There are 4 pure white, very fragrant flowers in an umbel with a cup in center. The beautiful evergreen foliage makes this always a decorative plant. \$2.50.

**Habranthus** bloom several times a year and at most any time. Culture like *Amaryllis*. After good growth, if allowed to get rather dry for a period they will usually flower after a good watering. Umbels have but one flower. **H. robustus**, pink lavender, 50c ea., \$4.00 per doz.

**Haemanthus.** The Blood Lilies of South Africa. So rare that few have seen them.

**Culture.** Hardy only in almost frost free climate like So. Calif. or Fla., if temperatures do not go below 24° at night. They do well in pots anywhere. The soil should be as for *Amaryllis*. They should have about half sun exposure. Pot with bulb only lightly covered.

**H. coccineus.** The true Blood Lily, altho all *Haemanthus* are known as Blood Lilies. The umbel of scarlet or blood-red flowers comes in late Aug. to Sept., after a 3 months dormancy. Two long semi-erect leaves follow the flowers and remain green thru the winter and early spring. The scape is attractively marked by red spots on a bright background. Flowering sizes, \$2.00 and \$3.00. Extra large, that should give two scapes, \$4.00.

**H. Natalensis.** A very rare bulb. They may be flowered in house or greenhouse or outside garden if weather is warm. Flowers from January to March depending on when started in to growth. We have only a very few of these bulbs at \$7.00 ea.

**H. multiflorus.** In general appearance, it resembles *Katherinae*. Stem heavily spotted brown. This species is ideal for pots as it is more tropical and more tender. Blooms earlier. Flowers are described by botanists as blood-red but you may disagree. Blooming size, \$5.00.

We ship *H. Katherinae* and *H. multiflorus* as soon as safe to mail.

**H. puniceus.** Evergreen plant with very attractive foliage. The leaves are very vivid

green, wavy edged with spotted petioles. Scarlet flowers in spring in umbel similar but smaller than *H. coccineus* and followed by red fruits. \$3.00.

**Hemerocallis.** Daylily. See spring catalog for descriptions and culture. Our selection, 10 for \$5.00, labelled, or \$3.00 per doz, assorted. 34 varieties as listed in spring catalog labelled for \$24.75. If by express collect we will send larger clumps.

**Leucojum aestivum.** Hardy in north. Blooms often before snow is gone. Dainty white flowers, each petal with a vivid green dot. Plant 4" to 6" deep. Do well in full sun, a little better in half shade. 3/35c. \$1.00/doz.

**Lycoris.** Oriental Spider Lilies are natives of Japan and China. The entrancing beauty of their flowers makes them the most popular of garden bulbs in the south and very desirable pot bulbs in the colder sections. The most tender is *L. aurea*. It is hardy only in the deep south. All the others are hardy up to Va., Ky., Okla., etc. They prefer sandy fertile soil with peat or leaf mould added, plentiful watering from mid-July.

**Lycoris albiflora.** Large white fls. with color markings. Almost hardy. \$1.00.

**L. aurea.** Golden Spider Lily. One of the most beautiful of all bulbs. Not hardy except in deep south. 75c ea. 3/\$2.00. 12/\$6.50.

**L. radiata.** Red Spider Lily. Hardest of these listed above. Hardy to So. Kans. Deep coral red. 25c. 5/\$1. \$2.35 per doz.

**Nerine.** This genus includes some of the most beautiful of flowering bulbs. They bloom in succession from about Aug. to Jan. Hardy only where temperatures seldom go lower than 26°, but they are fine pot bulbs. **Culture.** Pot or plant in acid, sandy soil. Add peat or leaf mould. Pot at once with bulb covered and a little deeper in garden, in full sun. When foliage yellows, withhold water. Keep as near dry as possible when dormant. There is only one reason why you do not all buy Nerines. You do not know their beauty and ease of culture.

**N. Bowdenii, var. Pink Beauty.** Has larger, finer flowers and flowers much later, usually in late Dec. or early Jan. Multiplies rapidly yet we can seldom have enough stock to list. \$2.00 each.

**N. Bowdenii, var. Magnifice,** very fine improved Bowdenii, similar to Pink Beauty but flowers earlier. Extra special price, \$1.00 ea.

**N. flexuosa, var. Alba.** A lovely white Nerine. \$6.50.

**N. fothergilli, pink hybrid.** A lovely deep pink much admired in our garden. \$2.00.

**N. rosea-crispa.** Hybrid of *Filifolia* but larger in all parts. Can be kept evergreen or dried off in summer. 35c ea. \$3.00 doz.

**Pancratium maritimum.** Very fragrant white flowers, in shape like an *Ismene* but pure snow white. **Culture.** Simple. Plant them 4" deep and watch them grow. Hardy in middle south. 50c ea. 3/\$1.25.

**Sprekelia formosissima superba.** Orchid amaryllis. Deep crimson flowers in orchid-like form. Much larger than common type, better color, more flowers. Evergreen. Fine in pots. Culture like *Amaryllis*. 50c ea. 3/\$1.25. \$4.50 per doz.

**Tulbaghia violaceae.** Mauve flowers produced thruout the year, a true ever-bloomer. Foliage has garlic odor if bruised. An acquisition for pot culture. 25c ea. \$2.00 per doz.

**T. cepaceae.** Superior clone buds are a deeper color than violaceae and flowers more freely. 35c ea. \$3.00 doz.

**T. fragrans.** This species has a large, true bulb, with glaucous green foliage, 18" long and 1" wide. It has no allium odor. The plant is a profuse winter bloomer in a cool room with a few flowers in summer. It has larger fragrant flowers than violaceae, in the same color. Evergreen. Special price. \$1.00, 3 for \$2.50.

**Vallota purpurea.** Scarborough Lily. Large funnel shaped, scarlet flowers in late fall. Slightly difficult for inexperienced gardeners but very desirable. Grow in pots same soil as for *Amaryllis* with bone meal added, and top of bulb covered by 1" of compost. We can't guarantee our bulbs to flower this fall or at any time. Suggest you feed them with

Spoonit or other liquid fertilizer. They are evergreen and must not completely dry off in winter. House or greenhouse culture is advised. They are a challenge to your gardening ability. Price \$5.00.

**Zephyranthes.** Fairy lilies. The smallest Amaryllid, 6"-12" tall. Fine in beds or borders. Hardy in middle south. In north, dig and store. They may be grown in pots. Give acid soil, sandy loam with leaf mould or peat. Full sun or slight shade.

**Z. candida.** Pure white, evergreen. The masses of white flowers in late summer make them outstanding in a bed or edging for border. Half hardy and easy in pots. 2 for 25c. \$1.00 per doz. 100, \$5.00.

**Z. rosea.** Small, but very lovely deep pink flowers. Fine in pots, about 8 in a 5" pot. 20c ea. 8 for \$1.50.

**Z. Sulphurea.** Deep yellow. 25c ea. \$2.00 doz.

The **Alliae**, or Onions, are now classed in Amaryllidaceae. The following are ornamental and useful for seasoning salads, soups or meats.

**Allium schoenoprasum.** True Chives. Grow in pot on window sill or garden in mild climates. Small clump 15c. 3 for 40c.

**A. neapolitanum grandiflorum.** Umbel of twenty to thirty dainty white flowers on tall stiff stem. Fine for forcing. 3/35c. \$1.00 per doz.

**A. Giganteum.** 4 ft. tall, lvs. two inches wide. Flowers bright lilac, in dense globose umbels 4 inches across. Native to Central America. \$2.85 each.

**A. ostrowskianum.** Deep carmine rose. Dwarf. 15c ea. \$1.25 doz.

**A. tuberosum.** Japanese Garlic. Deliciously flavored leaves. Evergreen and probably not hardy in north. Sm. 2 for 25c. Large 25c ea.

## IRIS FAMILY—Iridaceae

The Iris is the type genus of this family. Bearded Iris and Gladiolus are the outstanding members. Maricas are lovely and curious house plants, truly "out of the ordinary."

**Tall Bearded Iris.** No garden is complete without Bearded Iris. When in flower call at our gardens and pick out colors you want. **Special Offer.** If you do not care for names, we offer surplus rhizomes, 20 to 30 var., no labels, 100 for \$8.00, f.o.b. express. If by mail, send postage for 12 lbs. Collection of 10 fine varieties, labelled, our selection, \$2.50. 20 varieties, labelled, \$4.50.

**I. unguicularis.** Hardy only as far north as Washington, D.C. Bluish lilac fls. in winter. Needs partial shade. Water frequently when first planted. 50c.

**I. Douglasiana, var. Watsoniana.** Blue. Calif. native. Hardy in north. 75c.

**Iris reticulata.** This, smallest of bulbous Iris, is most useful for potting. Fragrant, violet blue flowers in January to February. Four bulbs in a 5" pot. Give a sunny window in a cool room. Hardy in south and in north if well protected. 25c ea. or 4 for 80c.

**I. Danfordiae.** Species. Golden yellow, very early. 15c ea. \$1.50 doz.

**I. Spuria.** Assorted colors in mixtures only, blue, bronze, yellow. 35c ea. 3/\$1.00. \$3.00 doz.

### Dutch Iris

Dutch Iris are a must for the spring border. These are bulbous Iris. The flowers are not fragile like Bearded Iris and are therefore useful for cutting.

**Culture.** Plant in the fall before November if possible. Plant 1 to 3" apart and 3 to 4" deep depending on size of bulbs. They are hardy in milder sections of north but a mulch is advisable. Full sun or slight shade. New best varieties.

**Blue Ribbon.** New large intense royal blue.

**Joan of Arc.** A magnificent large-flowered, milky white with large yellow blotch on petals. Perfect form. Very beautiful.

**King Mauve.** Handsome rich mauve flower, a distinct variety. **Outstanding.**

**Le Mogol.** New tall bronze.

**Tangerine.** Outstanding large deep gold.

**Wedgewood.** Very early. Wedgewood-blue standard, falls with paler blue.

Prices: 6/55c. \$1.00 doz.

### Freesias

Freesias are exquisite in beauty but their delicious fragrance is an appeal even stronger. Where they can be grown in the garden they are indispensable. They are easy forcers in pots and equally valuable for the window garden.

**Culture.** They are hardy only in the warmer sections of the south. Plant outdoors early before November if possible. Plant our large bulbs 2" or 3" apart and 3" deep in the garden.

**Freesia Tecolote Marie.** Largest, earliest and most beautiful of all white Freesias.

**Freesia Tecolote Hybrids.** Flowers of immense size, wide open and delightfully fragrant. Plants of unusual strength and vigor. Tall strong stems. Much finer than the standard commercial varieties. We offer them in mixture and Marie at 75c per doz., 50 for \$3.50, 100 for \$6.25.

### GLADIOLUS

The Gladiolus listed below will be ready in November. See last spring catalog for cultural directions and our new spring catalog out January 1, 1961, for larger list of varieties.

**New All American Glads.** Every garden should have these new Glads as well as the older varieties. Three new 1961 introductions.

**China Blue.** 1961. Soft blue, deeper at tips, lighter in throat.

**Gypsy Dancer.** 1961. Vivid fiery Orange with yellow on lower petals.

**Landmark.** 1960. Huge ruffled cream.

**Little Pansy.** 1960. Miniature violet with pansy face.

**Rusty.** 1961. Giant Smoky. Bright red mark on lip, silver picotee.

Prices. 35c ea., 3 for \$1.00, 12 bulbs for \$3.45.

**K and M Butterfly Gladiolus.** New. Small dainty ruffled flowers. Very popular for picking for the house.

**Elf.** Apricot, scarlet throat on yellow blotch, frilled.

**Melodie.** Salmon pink with orange scarlet blotches.

**Rendezvous.** Clear orange scarlet.

**Summer Fairy.** Reddish salmon, reddish maroon throat.

**Topolino.** Golden yellow, scarlet throat.

**Walt Disney.** Primrose with large scarlet blotch.

Prices. 2 for 30c, 6 for 80c, 12 for \$1.50.

**Assorted varieties.** No. 1 to Jumbo, \$1.00/doz. \$7.50/100, postpaid, or \$6.00 express collect. Good flowering size, 50c doz. \$3.50/100.

**Miniature Gladiolus.** Like a miniature carving, a cameo or fine lace, they are dainty, beautiful and alluring. Fine for cut flowers. All are good blooming size bulbs. **Assorted Colors,** \$1.00 doz.

**Tristis concolor. Evening Flower.** The fragrant glad. Sweet, spicy fragrance in the evening. Creamy white. 15 to 18 inches tall with three to five flowers on each stem. Where climate permits they should be left undisturbed for several years. To be effective they should be planted in clumps. 3 for 65c. \$2.00 per doz.

**Neomarica** or Walking Iris are tropical and are favorite house plants for their unusual habit of growth.

**Neomarica gracilis.** Smallest and earliest. Use 5" pot. 75c.

**N. Northiana.** Larger plant and flowers, slow propagator. Use 6" pot. \$1.75.

**N. hybrids.** We crossed the above species and raised plants with flowers as large as *Northiana*, as profuse as *gracilis* and plants midway in size. They are rapid multipliers. \$1.75. All 3 kinds for \$3.75.

**Moraea polystachia.** 2 ft. stems produce a multitude of iris-like flowers, violet with mauve and yellow in throat. A bed is a stunning sight. They increase rapidly by self-sown seed. Hardy in south and middle south to Tenn. In the north grow in a 5" pot, sandy soil with leaf mould, full sun. 15c and 25c ea. \$1.00 and \$2.00 doz.

**Culture Suggestions.** *Moraea* and *Sparaxis*. These are most desirable items for Southern Gardens. All are hardy to about 24° to 26°. All need full sun exposure, prefer sandy or light soil and should be planted about 2" apart in garden or pots and 2" or 3" deep. All are winter bloomers and as house plants must have cool rooms. Height of plants is stated in inches, thus 20".

**Sparaxis.** Richly colored fls., on plants about the size of *Freesias*. Mostly red shades. No perfume. Easier to flower in pots than *Freesias* and hardier outside in south. Large. 3/15c. 50c doz.

## LILY FAMILY — Liliaceae

**Lilium.** This genus includes all true lilies, altho *Gloriosas* are so close that the flowers are similar in form. **Culture.** Plant 4" to 6" deep (deeper probably in north) in mildly acid humus—leaf mould, peat. Planted among low shrubs, where tops may reach up into the sunlight, with their feet cool and their heads warm, they are ideally situated. They do well in the half shade of trees or a lath house. All can be grown in pots, but after flowering must be shifted to garden.

**Lilium auratum platyphyllum.** Gold Band Lily. This exotic flower is a native of Japan. Considered the world's most beautiful lily. Richly fragrant. \$1.25 ea. 3/\$3.50.

**L. Croft.** It makes a shorter stem and a more spreading flower head and thus more attractive in pots than some lilies used for Easter. Fine for southern gardens. Price. 60c each. 3/\$1.60.

**L. Golden Clarion.** The golden and lemon-yellow trumpet lily. They are dependable, sturdy, vigorous and prolific garden plants that should thrive wherever a Regal Lily can be grown. 5 to 7' tall when well grown. \$1.10 ea. 3/\$3.00.

**L. Red Champion.** A strain of the species *L. speciosum*. A grand lily for garden decoration, cut flower or pot culture in a cool greenhouse, uniform, disease free and vigorous. A well-drained soil where it can receive light shade during the hottest part of the day is the main requirement for successful culture. Price. 75c ea. 3/\$2.00.

**Brodiaea uniflora.** Lovely porcelain blue flowers on a low plant. Usually grown in pots in north but a customer reported them hardy in Ohio. 6 bulbs in a 4" pot will go well with *Oxalis* in your kitchen window garden. Must have a cool room. Outside in southern gardens. 3/15c. 50c doz.

**Lachenalia aurea.** Beautiful golden yellow pendulous flowers. They are ideal bulbs for pots, blooming earlier than most any bulb. Culture similar to *freesias*. 3 for 45c, 6 for 90c, \$1.75 doz.

**Leucocoryne ixiodes odorata.** (Glory of the Sun.) Large, fragrant, blue flowers in spring. Culture like *freesias*. Plant 4 inches deep. The exquisite flowers last a long time when cut. 3 for 50c, \$1.85 per doz.

**Ornithogalum arabicum.** (Star of Bethlehem.) The showiest species. White with glossy black eye. Easy in pots. 3 for 40c, \$1.50 doz.

**Roman Hyacinths.** Have single flowers, a less dense raceme than the Dutch Hyacinths but they have equal fragrance and great beauty, in the garden or in pots. **Culture.** Plant 3" to 4" deep in rich sandy loam containing much humus. **White, Pink and Blue.** 3 for \$1.00. \$2.50/doz.

*Scillas* are closely related to *Hyacinths*. All are hardy except *S. peruviana* and it has been grown in gardens in Brooklyn on L.I.

*S. hyacinthoides*. One of the finest bulbs for the outside garden as it is perfectly winter hardy in north. It has a densely flowered raceme often 3 ft. or more in height. Ideal for the perennial border just the blue you want. Plant in full sun. If early planted in the south it will flower in late winter to spring. In the north about mid-summer. Flowers are very useful for cutting. The bulb is extremely hardy and a strong grower. Take my advice, plant it. 25c ea. \$2.35/doz.

*Scilla peruviana* is an ideal bulb for pots or garden. It is hardy to N. Car. and in Long Island. As a house plant it does well in cool but sunny rooms. Give full sun outdoors. Winter bloomer. The short foliage is nice and flower head is oval and on a short stem. Blue fls. Sometimes a White. Blooming size, 50c. 3/\$1.25. Special \$4.50/doz.

*Veltheimia viridifolia*. This is one of the most beautiful plants one can grow in a pot. The glossy vivid green leaves are wavy margined and form a perfect rosette much like a bird's nest fern. From the center arises a scape with tubular, drooping flowers closely spaced. The color is a deep rosy or purplish pink of an ineffable tone not found in any other flower. If planted early in Southern gardens or in pots it should flower as early as Dec. 15 and continue for nearly 3 months.

**Culture** is very easy. Use a sandy or sandy loam soil to which is added fine screened peat or leaf mould about one-third or fourth. Some charcoal is good. Read general potting directions. Price \$1.25 each. 3/\$3.35.

## OXALIS FAMILY — Oxalidaceae

There are three types, Winter growing, Summer growing and Evergreen. The following are winter growing and blooming or evergreen. *Oxalis* are the brightest and most vivid of winter flowers for a sunny window or in outside beds in the deep south, where temperatures do not go much below about 26°. They give a profusion of bloom over several months time. They need a cool room.

**Culture.** Plant about 2" deep, 3" apart. Large bulbs may be farther apart and a little deeper. In pots, the smaller may go 6 in a 5" pot. They need full sun exposure and do best in a very sandy soil, rich or poor. Flowers close at night and on dark days. Tuberous rooted species start very slowly. Keep them moist and be patient.

*Oxalis adenophylla*, lilac rose. 15c ea. \$1.50 doz.

**O. Bowici.** A large plant with bright rose red flowers. 3 bulbs to a 5" pot 5c ea. 50c/doz. \$3.75/100. Largest size 10c ea.

**O. cernua.** Bermuda Buttercup. Deep golden yellow flowers. Very profuse. 5c ea. 50c/doz. \$2.50/100. Extra jumbo bulbs 10c, 3 for 25c, 85c/doz.

**O. crassipes.** Flowers bright rose. Evergreen and everblooming increases by tubers and can be moved at any time. Plant at once. Large tubers 15c ea. \$1.00/doz.

**O. crassipes alba.** A pure white form. Very pretty. 25c ea. 6/\$1.00.

**O. Grand Duchess.** Low growing plants, but give a profusion of very large flowers in two colors. Lavender, Pink, and White, 5c ea. 50c/doz. \$3.50/100. Largest size 10c each. Botanically, this is probably *O. variabilis*.

**O. hirta.** This rare and unusual *oxalis* makes a semi-erect leafy stem about 8" long. The violet flowers are borne in the axils of the leaves. 2/25c. 12/\$1.00.

**Oxalis Special.** The bulbs offered in this lot are assorted in size and color. They will all flower well. Some are accidentally mixed, others are surplus. Price, 30 for \$1.00.

## THE CALLA LILY FAMILY — Araceae

This family contains the so-called Calla Lilies or *Zantedeschia*, Black Callas and other Aroids.

**Culture.** All *Zantedeschias*, *Arum palaestinum* and other aroids listed here are desirable for pot culture. *A. palaestinum* will start about Sept. or later. Do not put this

bulb into moist soil before that or it will rot. *Zantedeschias*—pink and yellow—may be potted by about Dec. 15. Don't rush them, as too much water before they start to grow may rot them. It is really better to start in early spring, here in late February. All do well in the garden in a moist semi-shaded cool place. They are not hardy in cold climates; dig in fall. The White Calla usually blooms in California in the garden in late winter. They may be planted in early fall in pots or garden. All do best in mildly acid soils, on sandy side. For acidity add peat. Most Aroids are shade plants.

It is an error to keep large White Callas growing continuously. If rested thru summer you will be rewarded with flowers. Callas as pot plants need some sun, enough to prevent spindly growth, plenty of light and like all plants, good ventilation. They need abundant water but good drainage.

*Zantedeschia aethiopica*. Well known **White Calla**. They can be potted anytime between Sept. 1 and Jan. 1. Even later if available. Water once when potted to settle soil. Then keep soil barely moist until growth is well started. When growing well they need plenty of water and perfect drainage, give about half shade. They are hardy outdoors down to 15° but tops may be cut down by frost at about 20°. Blooming size, 25c. Large 50c. Small offsets for foliage only, 15c.

*Z. albo-maculata*. Spotted-leaf Calla. The prettiest foliage of all and worth growing for that alone. Endures sun best. Flowers, creamy white. 50c each.

*Z. rehmanni elegans*. Light pink Calla. Easier to grow and flower than the dark pink. A few are very light, almost white when forced but darker in the garden, and always beautiful. Large bulbs, 40c. 3 for \$1.15. Delivery Nov. on all *Zantedeschias*.

*Z. elliotiana*. Deep Golden Yellow Calla. Like all the callas, they need some sun. If they do not have it they grow too tall and weak and may fail to flower. Half sun is usually right. Delivery Nov. 40c ea. 3 for \$1.00.

*Arum palaestinum*. **Black Calla. Solomon's Lily**. Foliage and flowers are shaped like Callas but flowers are black and odorless. Plant 4" deep in garden, not so deep in a pot. Begin to water about Sept. 1. Flowers in Feb. Large for 50c and \$1.00 ea.

*Heliconia muscivora*. Twist arum. A curiosity. Blow flies like its "fragrance." The flower spathe is contracted in the middle and bends at a right angle and opens in an 8" or wider flower. Pale purple, covered by long white hairs, the tube spotted. Summer flowering. Hardy in deep south. We have very few tubers and must price all sizes at \$2.50.

*Anthuriums* and *Spathiphyllums* are closely related and were formerly both classed as *Anthuriums*. The flowers slightly resemble Calla Lilies but have a waxed or lacquered appearance and are much used by florists.

*Anthurium scherzerianum*. This species is easy to grow as a house plant as it is less demanding about temperature, etc. Mature, old plants may become 15" to 18" tall, but they start blooming at only 4" or 5" tall. Colors range from red, spotted red and white, to white. Blooming size, assorted colors only \$3.00.

*Spathiphyllum Clevelandi*. Close relative and formerly classed as an *Anthurium*. Foliage is oblong and pointed. Flowers are pure white. Very attractive. Free blooming. They are easy to grow as house plants, in 4" pots. Small plants, \$1.00. Larger \$1.50.

*S. floribundum*. Larger and better than *S. clevelandi*. Large plants, \$3.00. Sm. \$1.50.

## THE GESNERIA FAMILY — Gesneriaceae

The Gesneriads listed here are tropical or semi-tropical. They are strictly house plants outside of the tropics. Most of them are for the warm house. All are either tuberous rooted and deciduous or fibrous rooted and evergreen.

**Gloxinia Seed.** We have a very good mixture of seed, 50c packet, 3 for \$1.25. Please send stamped addressed envelope for seed.

**Seed Culture.** Place fine grained vermiculite or terralite in the bottom of a plastic refrigerator dish 3" to 4" deep and moisten well. Plant seed very thinly over surface. Keep



covered with lid until plants are ready to pick out. One must make sure that moisture does not escape and add water if it does. They may be picked out and transplanted into 2" pots after second pair of leaves develop. We also plant seed in 9" pans, half filled with peat and milled sphagnum. When planted cover pot with glass. We grow many rare seeds by either method, including African Violets. Gloxinias flower at about 5 months.

**Episcia dianthiflora.** This is a vigorous grower with small green leaves and white flowers with fringed petals in spring and summer. \$1.50 ea.

**Columnneas.** Are epiphytic climbing vines, having large, vivid red flowers. They may be grown in pots, soil similar to that of other Gesneriads, but we prefer to grow in wire baskets of pure sphagnum or with the center of sand and peat, equal parts.

**Columnnea gloriosa.** The most profuse bloomer. **C. Schiedeana**, very large, thick stems. **C. microphylla**. **C. Banksii**. **C. Allenii**. **Araguda**. \$1.25 new low price. One of each for \$7.00.

**Aeschynanthus (Trichosporum).** This is a nice trailing, almost woody vine. In nature, they are epiphytal and climb trees. The plants are attractive and the freely produced large flowers are tubular and vividly colored.

They are tender tropicals and shipment will be made only when weather permits. We grow them in wire baskets, lined thickly with sphagnum and with peat and sand in center. They do well in pots. They require constant moisture. Leaves and flowers drop when dry.

**Aeschynanthus lobbiana** has scarlet fls. in a purple calyx. \$1.25 postpaid.

**Gloxinias.** We have a few assorted tubers, they are assorted sizes but all good flowering size. 50c ea.

**Reichsteineria seed.** Culture same as Gloxinias. Fresh seed \$1.00 packet. Self-addressed stamped envelope please. **Reichsteineria tubers**, 50c ea.

**Streptocarpus** are fibrous rooted evergreen and can only be moved as growing plants. The culture is much the same as for gloxinia except as to temperature. They thrive in a cool house and are easily grown in a lath house. The flowers are smaller and freely produced. They are followed by long twisted seed pods, hence their name. \$1.00 ea., 6 for \$5.00.

## AFRICAN VIOLETS — Saintpaulias

See spring catalog for cultural directions. If you do not have one we will send one for 10c. We recommend Blue Whale and/or Spoonit. See supplies.

We have many varieties not listed in catalog. If when you are ordering you wish to ask for other varieties and if you promise to pay as soon as received we will send if we have them in stock. We have a number of new varieties in this list. Some are in small quantities, so please give us a few substitutes, otherwise we will substitute as near like ones ordered or with better varieties.

**Sales Tax.** Californians must include 4% Sales Tax. Out of state customers sending plants as presents to a California friend must also pay it. Please read "Terms and Instructions for Ordering," and comply on all points.

Please add 50c toward postage and packing. If wanted by Air Mail or Special Delivery you must pay for this. Please estimate cost and promise you will send the difference if not enough. Please see Terms and Instructions.

For prices on plant stands, pots and other supplies for growing African Violets please see "Garden Supplies."

**Afterglow.** Reddish pink double with dark girl leaves. \$1.25.

**Amanda.** Bright double ember pink blooms, very large, on dark green foliage. \$1.25.

**Angel Flake.** New. Large ruffled white faint lavender pink edge. Slightly ruffled light green pointed leaf. \$2.00. Sm. \$1.00.

**Autumn Moon.** Wavy leaves. Dark blue fringed double. \$1.25.

**Blue Crepe.** Wavy leaves, red underside. Fringed dark blue double. \$1.25.

**Blushing Beauty.** Lovely white or cream single with pink edge. \$1.50.  
**Cerama.** Much admired. Deep rose center, almost white edge. \$1.25.  
**Charm Song.** Charming light blue double. Tailored foliage. Sm. \$1.25.  
**Color Magic.** Dark single pink, girl foliage. \$1.25.  
**Constance Hansen.** Medium blue frilly double, bronzy foliage. \$1.50.  
**Cydonia.** Dark leaves. Semi-double dark purple flowers. \$1.25.  
**Dorothy Gray.** Creamy pink double with chartreuse edge. \$1.25.  
**Double Peach Blossom.** Dark quilted leaves. Peach blossom double. \$1.25.  
**Double Pink Fire.** Wavy dark leaves. Deep pink fringed double. \$1.50.  
**Double Ruffled Queen.** Supreme foliage. Red violet fringed double. \$1.50.  
**Ember Dream.** Bright raspberry red semi double on dark quilted foliage. \$1.25.  
**Encore.** Large full double bright pink flowers, dark green leaves. Sm. \$1.25.  
**Fancy Free.** New. Warm peachy pink full cactus type double born in profusion on brown stems and bronzy dark green tapered foliage. \$2.00. Sm. \$1.00.  
**Feathertop.** Heavily frilled pink double. Deep bronzy green frilly foliage with red reverse side. Sm. \$1.25.  
**Finesse.** New. One of finest Peachy Pinks. Huge full double frilled flowers that open like a tea rose. \$2.00. Sm. \$1.00.  
**Fire Dance.** Red single. \$1.25.  
**Fuchsia Bride.** Bright fuchsia, large flowers. Semi double on bronze girl foliage. \$1.50.  
**Gibson Girl.** Exceptionally deep purple giant flowers, white edge. \$1.50. Sm. \$1.00.  
**Good News.** Deep pink double. \$1.25.  
**Headliner.** Heavy girl leaves. Deep very large single pink. \$1.25.  
**Hollywood Ace.** Large cluster blue flowers. Double dark scalloped leaves. \$1.25.  
**Iroquois.** Fine flowering rose pink double flowers. Dark leaves. \$1.50.  
**Jewelstone.** New. Large delicate lilac white full double. Frilly blooms on dark green girl foliage. Chartreuse edge. \$2.00. Sm. \$1.00.  
**Jubilee.** Large round leaves. Tu-tone pink double. \$1.50.  
**Judith Ann.** New. Medium blue, dark center. Dark wavy foliage. Our introduction. \$1.50.  
**Legionnaire.** Giant dark blue, white edge. Dark green foliage. Profuse bloomer. \$1.50. Sm. \$1.00.  
**Little Jewel.** Dark frilled double pink, ruffled flowers. Dark wavy leaves. \$1.50.  
**McGenty.** Medium blue double. Girl foliage. Makes a very nice plant. \$1.25.  
**Melody Air.** Plain leaf. Double white with pink. \$1.25.  
**Olivia.** Wavy leaves. Fringed double pink. \$1.50.  
**Pink Camellia.** Light pink double. Dark supreme leaves. \$1.50.  
**Pink Crown.** Formal double pink. Plain leaves. \$1.25.  
**Pink Petticoats.** Fringed deep pink single. Dark bronzy leaves, red back. \$1.25.  
**Pride of Rochester.** Lovely light pink, large double. \$1.50. Sm. \$1.00.  
**Priscilla Laudaker.** New. Most beautiful ruffled semi to double white flowers, upper petals green. Girl foliage. \$2.00. Sm. \$1.00.  
**Raspberry Pink.** Very large double pink. Sm. \$1.25.  
**Raspberry Sherbet.** Ruffled leaves. Orchid double with Fantasy markings. \$1.50.  
**Red Glow.** Pointed leaves. Raspberry single. \$1.25.  
**Snow Ball.** Free flowering double white with quilted leaves. \$1.25.

**So. Sweet.** A beautiful double pink, much darker center. \$1.50.

**Spotlight.** Very large pink with very dark center. Flowers rather long. \$1.50. Sm. \$1.00.

**T. V. Vallen Pink.** Wavy leaves. Fringed pink single. \$1.50.

**Valiant Heart.** Plain leaves. Deep pink single. \$1.25.

**Valor.** A very beautiful glowing purple single. \$1.50.

**Yolanda.** Large double pink, with flexible plain foliage. Sm. \$1.25.

**Wedgewood.** Luscious light blue double, excellent black-green foliage. Sm. \$1.25.

**Winged Beauty.** New. Deep lilac frilled cup blooms with wavy white edge, on dark green girl foliage. Very popular. \$2.00. Sm. \$1.00.

**Wintry Rose.** Double wine and orchid with wide white edge. Sm. \$1.25.

**Leaves,** 50c ea. \$5.00 per doz. If you want them by air mail please send \$1.00 for postage and packing. If special delivery add 45c. Please give a few substitutes, if you do not, we will substitute with as good or better varieties if necessary. Dbl means double, b blue, p pink, w white. Many new varieties in this list.

Alabaster, dbl w

Aletha Martin, dbl

Angel Child

Angel Fringe

April Love, dbl l b

April Mist

Berkeley Belle

Bernice Supreme, dbl b

Black Cherry Sup., dbl r

Blaze

Blue and Green

Blue Rose

Blooming Fool, dbl b

Blushing, dbl

Blushing Beauty

Buttermilk Sky

Blue Peak Sup., dbl

Bud's Yum Yum

Candy Lace

Cerama

Chari Belle

Charm Song, dbl l b

Chocolate Brownie

Clear Skies, l b

Coon Valley, dbl d b

Dapper Dandy, dbl b

D'Amour, r

Diane

Dbl. Clarissa Harris

Dbl. Holly, l b

Dbl. Peach Blossom

Dbl. Pink Fire

Dbl. Pink Waverly

Dbl. Rose Wing

Dbl. Ruffled Queen

Dbl. Violet Supreme

Dona Felisa

Edena Rose, dbl

Fair Elaine, w

Feathertop, dbl p

Fifi, dbl p

Finesse, dbl p

Florabella, p

Frathel's Dbl. Holly

Frisly Blue Cluster

Fremont Joy, dbl p

Fringed Haze

Fuchsia Bride, dbl

Gay 90's

Geneva Nueva

Gibson Girl, b

Great Lakes, dbl b

Green Beads, dbl p

Green Dawn, dbl p

Green Froth, w

Headliner, p

Highland Lassie, l

Ivory Tower

Jeweltone, dbl

Jo Jo

Jubilee, dbl p

Kathy Jean

Lemon Dip

Lemon Drop

Linda Marie

Little Jewel, dbl p

Livin' Doll, p

Lucky Streak

Marilyn K., dbl b

Maumee Vesper, b

McGenty, dbl b

Mint Champagne

Mint Popcorn, dbl

Mistletoe, dbl w

Mr. Lincoln, b

Northern Autumn, dbl

Pandora

Peach Bud

Pink Camellia, dbl p

Pink Constellation, dbl

Pink Dogwood

Pink Drift

Pink Fire, dbl

Pink Geneva

Pink Jade

Pink Monarch

Pink Phantom

Play Boy Sup., p

Portrait

Princess Joan

Priscilla Landaker, dbl w

Purple Honey, dbl

Racy Red

Raspberry Sherbet

Redderness, dbl

Renegade

Rose Sparkler

Sierra Snow Flake, dbl w

Snow Ball, dbl

Snow Drop, dbl

Snowy Princess

Spanish Senorita, dbl

Sparkling Waters, b

Spotlight, p

Spun Sugar

Star Holly

Starmaker

Susan

Tea Time

The Mikado

Tip Top

Thunderhead, w  
TV Vallen Pink  
Wedgewood, dbl b

White Pride Sup., dbl  
Winged Beauty  
Winter Mist

Winty Rose, dbl r  
Witch Craft  
Yolander, dbl p

**African Violet Leaves** 35c ea. 3 for \$1.00. \$3.00/doz. Any over 12, 25c ea. 25/\$5.00. We give extras depending on size of order. We will be glad to make selections for you if you will give us price range, color, single or double.

Alaskan Waters, dbl b  
Angel Flake, dbl w  
Angel Lace  
Autumn Moon, dbl b  
Beau Kay, dbl r  
Blue Crepe, dbl b  
Blue Duet, b  
Blue Pom, dbl b  
Cathy Reed, p  
Centennial Sweetheart, p  
Cherry Ice  
China Doll  
Clarissa Harris, p  
Constancia  
Corrine, dbl w  
Cup of Claret, r  
Dorothy Gray, dbl p  
Dixie Moonbeam  
Dolly's Dream, dbl b  
Double Inspiration Sup.  
Dbl. Midnight  
Dbl. Red Comet  
Dbl. Uncle Bob, p  
Dbl. Snow Frills  
Ebb Tide  
Ember Pink Sup.  
Fancy Free, dbl p  
Fire Dance, r  
Fringed Pom Pom

Grotei Red Girl  
Good News, dbl p  
Her Grace  
High Noon, r  
Holly Halo  
Hollywood Ace, dbl b  
Hugonaut, dbl  
Improved Boyce Edens  
Iroquois, dbl p  
Kimberly  
Legionnaire  
Lilac Dale  
Lingo  
Little Giant Blue, dbl  
Little Giant Purple, dbl  
Love Knot, dbl p  
Love Song, b  
Mark Roberts  
Masquerade  
Matchmate  
May Melody, dbl b  
Melody Air, dbl p  
Miss Monroe, r  
Mr. Chicago, dbl b  
New Dawn, r  
Peach Chiffon, dbl  
Pink Grotei  
Pink Petticoats  
Pink Puff

Pink Vixen  
Prestige  
Pride of Rochester, dbl p  
Red Glow  
Rose Wing  
Santa Maria, b  
Sea Foam, dbl  
Senora Ramona  
Shag, dbl  
Show Cloud, dbl  
Show Day  
Show Stopper  
Silver Field, dbl  
Skywayman  
So. Sweet, dbl p  
Spic, dbl b  
Star Gazer  
Star Blue  
Sunbonnet Sue  
Torchy  
TV Beaumont Beauty  
TV Cut Velvet  
TV Play Boy  
TV Scandal  
TV Whispers  
Valor Blue  
Velvet Queen  
White Goddess  
Whiff, r

We are preparing a list of older as well as new African Violet leaves not in catalog. Please send stamped addressed envelope if interested.

## BEGONIA FAMILY—Begoniaceae

We list the Tuberous Begonias in our spring catalog. We have listed the Semperflorens and Rex. The lovely double semperflorens are very popular at our greenhouse.

**Begonia semperflorens.** Double Rosebud. \$1.00 ea.

**B. Christmas Candle.** Double red. Light green leaves. \$1.00.

**B. Rex, Sue Zug.** Beautiful red leaf, \$1.50.

**B. assorted varieties.** We have a number of nice varieties at \$1.50. 3/\$4.00.

## THE ORCHID FAMILY — Orchidaceae

The ideal place for an amateur to grow orchids is in a hobby greenhouse.

Our recently revised 12 page booklet How to Grow Orchids is now 50c per copy, postpaid. Add 2c sales tax in California.

**Culture of Cattleyas.** By far the most desirable of orchids. Many amateurs are having success in growing and flowering this most beautiful flower. When ordering, if not before be sure to order the "1949 Orchid Price List." Briefly you must have a greenhouse, a room or a glassed in porch where the plants will have good, strong light but no direct sun, unless a little in very early A.M. or late P.M. Greenhouse glass must be shaded by a coat of white wash or shading compound. In the home, shading may be had by using muslin curtains. If the foliage becomes very light green or yellowish the light is too strong; if a deep rich green, the shade is too much. 65° to 80° is close to the best temperature range. Note the temperature, light exposure and humidity favorable to African Violets. The same is about right for Cattleyas. You can grow them side by side. But watering is different.

We spray the foliage of Cattleyas at least once a day in summer and if hot often twice. This cools them. Do this about noon, earlier if temperature becomes too high. Do not spray in late P.M. as foliage should become dry before night. When cool weather arrives we spray less often, much less often in winter. Once or twice a week may be enough or even too much if you do not properly heat for their comfort. A little water held around the base of a bud spathe may cause it to blacken and rot off. Much water on the roots or surfaces of osmunda will rot the roots. Over watering Cattleyas is the most common error. We do not usually pot water oftener than once a week and often spraying is enough if some falls on the osmunda. You must study your plants and note their reactions. Success will reward you.

**Cattleyas.** We offer blooming size plants for \$5.00. These are in 4" or 5" pots. Assorted species and hybrids.

**C. Genevieve Toy.** (C. Cordary x C. Ardentissima.) Flowers very dark and beautiful. Spring. 5" \$15.00.

**White Cattleyas** are not common. The following are mostly June flowering, for brides but do not pin us down on this as cultural conditions may result in a wide variation in flowering date. **C. Edithiae**, purest white \$8.50. Our selection of other whites, \$6.50.

Potted Cattleyas can only be shipped by Express f.o.b.

**Bletilla hyacintha.** Lovely hardy, terrestrial orchid. Plant before Mar. 1. The best soil contains much sand and peat. 8 to 12 lovely little purple orchids on a scape 15" tall. Price 40c. 3 for \$1.00. \$3.50/doz. postpaid. \$25.00/100 by express, f.o.b.

**Brassovola Digbyana.** Plant resembles a Laelia. The white flowers have a fringed lip and are used to cross with Cattleyas in order to get fringed lips. We grow in baskets of Sphagnum but others grow in osmundine in pots like Cattleyas. This species is hard to get. Price \$10.00, in 8" wire basket, f.o.b. express.

**Habenaria radiata. The Egret Flower.** (At last! An orchid anyone can grow anywhere.) A deciduous terrestrial orchid from the orient that grows from small bulbs about the size of a bean. The glistening pure white flowers are held on stems twelve to fifteen inches high. Each stem carries two to five flowers one to two inches in diameter. The long green spurs add much to the attractiveness of the flowers. The feature of the flower is the fringed edges of the lip which gives the flower the appearance of a crane in flight. The individual flowers are long lasting and very pretty.

The plant is extremely hardy and will survive sub-zero weather, but will grow equally well in our southern climates or in a glass house. Packed moist, the bulbs will keep for many months in a refrigerator, and may be planted monthly in order to have flowers nearly all the year. It may be planted in almost any medium, such as garden soil, peat and sand mixture, orchid mixtures, sphagnum moss or leaf mould. If in moss it must be fed regularly, otherwise treat it like any other plant in your garden or house. The one most important cultural point is never to let it go dry. It must be kept moist at all times. We recommend six bulbs to a four inch pot. Order now but they will be delivered after or about November 1. We have the promise of these earlier. They will be sent just as soon as we receive them from Japan. 6 for \$1.50. \$2.50 doz.

**Epidendrum o'brienanum.** This orchid has a large terminal cluster of brilliant red flowers, each in the typical orchid form. The flowers open 10 or more at once and are about 1¼" wide. The plant makes a large cluster of tall stems, 3 ft. or more. Under good culture they flower all the time. They will grow well in full sun exposure; and abundance of water in summer. They grow easily in the garden in the south. In the north they are easy in pots or baskets. Small rooted plants 75c ea.

Osmundine, best Florida grade, \$2.00 lb. postpaid.

## MISCELLANEOUS

**Tecolote Ranunculus.** Giant Double Camellia type blooms and huge brilliant Ruffled Doubles. 50c doz. \$3.75/100. **Anemone St. Brigid.** Large double and semi-double flowers. Mixture of brilliant hues and delicate shades of scarlet, rose, pink, lavender and blue. 60c doz. \$5.00/100. **Anemone Monarch de Caen.** Magnificent strain of single Poppy Anemone with immense flowers. Mixture 50c doz. 100/\$4.00.

**Culture.** Hardy only in deep south. It is best to start after summer heat has gone—in mild autumn weather. Don't forget to keep them moist. Transplant to garden in deep south or to pots in north. You can start them or grow them in a cool room in the house in winter. They should have sandy soil with peat added. Heat is their enemy.

**Aphelandra Louisi.** A new plant for the window garden or greenhouse. Deep green with white veins. Flowers are yellow. New and very popular. Small plants \$1.00 each.

**Ceropegia.** The following are vines having long trailing or twining stems. They may be grown in soil composed of loam, sand and leaf mould or peat, in pots or hanging baskets. Plant at once and keep only slightly moist until started. The flowers are very unusual. Prices are for small tubers or cuttings.

**Ceropegia Woodi.** Hearts on a String. Sweetheart vine. Rosary vine. Heart shaped leaves. The most desirable species. 50c.

**C. debilis.** Cylindrical leaves. Rapid grower. 35c.

**C. Barkleyi.** The oblong leaves are pointed at the apex. 60c.

**Cacti and Succulents.** 10 assorted Cacti or Succulents, \$1.50. 20 all different. \$2.25.

**Heliconia species.** Heliconias are sometimes grown in the greenhouse, or out-of-doors in warm regions for the foliage effects, making large clumps if given room. The plants thrive well in rich loam with plenty of water. They have large banana-like leaves. \$2.00.

**Philodendron selloum.** A popular Brazilian species. Cold-resistant, can stand slightly below freezing. Large, notched leaves. Sm. \$1.00. Larger plants \$2.50.

**Strelitzia reginae.** Bird-of-Paradise. These should flower by next season with good culture. \$3.00.

**Tree Peonies.** Higurashi. Double red. Yachiyo-Tsubaki. Double pink. Hanadaijin. Double purple. \$3.00 each. One of each \$8.00.

**Gingers.** Culture. Plant in rich soil, provide light shade and plenty of water. They should never dry out while growing. They refuse to flower if kept too shaded. The flowers are produced in terminal heads and are very fragrant. Delivery anytime.

**Alpinia nutans.** Shell ginger. Very tall growing evergreen ginger lily. The attractive flowers are produced at the top of the leafy stems. Flower spikes hang downward like a cluster of grapes. In bud it is white tipped pink. Open flowers exhibit orange and red inside. \$1.75.

**Hedychium coronarium.** Garland-flower. Floral bracts large and firm and closely imbricated, with 4 to 6 white very fragrant flowers. \$1.00.

**H. flavum.** Yellow Ginger. Much like Gardnerianum, tall grower. \$1.00.

**H. gardnerianum.** (Kahili Lily) Lvs. 1½ ft. long and 6 inches wide; fls. light yellow, with red stamens. Fragrant and a sure bloomer. \$1.00.

**Kaempferia.** The jewels of the Ginger Family of plants; They have extremely ornamental foliage and fugitive, bright and cheery flowers. Excellent subjects as house or glasshouse plants. Pot in a rich, porous compost in four inch pots and treat like any other deciduous bulbous plant. Water and fertilize well when in active growth, but keep nearly dry when dormant. For best results repot in fresh compost each winter.

**Kaempferia galanga.** Bright green oval leaves. The flowers are crystal white with purple eyes, and bloom in summer. Very dwarf. \$2.00.

**K. involucrata.** Light green oval leaves prominently ribbed. Lilac flowers in summer. \$1.50.

## THE PINEAPPLE FAMILY — Bromeliaceae

Bromeliads include *Billbergia*, *Aregelia*, *Aechmea*, and many other genera.

*Billbergias* are most unusual and fascinating plants. Not only are the flowers in intriguing pastel shades but the floral display is made brilliant by the large vividly colored bracts that cover the scape. The leaves form a rosette and are more or less rigid. Some have brightly colored leaves and others are often mottled, striped or barred. All are desirable foliage plants.

In the outdoor garden they should have the same soil as recommended for pots. A few, like "nutans," will grow in nearly any soil but will do much better in the type recommended. They do well on the trunks of Palms.

They need about half shade. Too much sun will burn and finally destroy the foliage. Those species and varieties having highly colored foliage do not develop their rich colors when too deeply shaded. Most of our plants are grown in a well shaded Clivia house. When well established and growing, richer colors may be brought out by giving a little more sun than we do. **Culture** of *Aechmea* and *Aregelia* is the same.

**Aechmea calyculata.** The cones of bright yellow flowers are carried on thin stiff stems 18" high. Tubular rosettes of bright green foliage are about 15" high. \$1.50.

**A. mariae-reginae.** Robust rosette of broad, gray-green, leathery leaves, recurved and with toothed edge; stout spike with pendant, delicate pink bract-leaves, topped by cylindrical head of red-tipped berries and violet flowers. \$7.50.

**A. ortgiesii.** A very useful dwarf plant with rosettes of recurved serrated leaves looking more like a *Dyckia* than an *Aechmea*. The deep lavender flowers are carried on a brilliant red cone in the center of the leaves which also become red occasionally while the plant is in bloom. \$5.00.

**A. pineliana.** Attractive, wide open rosettes of foliage toothed with dark spines, and colored soft shades of rose, copper, gray and green. The stem is covered with red bracts and topped by a small head of yellow flowers. The berries last a long time in color. \$3.00 each.

**A. tillandsioides.** Foliage resembles *Billbergias*. 1 foot high, red bracts. Flowers yellow followed by turquoise. \$5.00.

**A. Weibachii.** Attractive rosette of oblanceolate coppery-green leaves wine red beneath, and spined; inflorescence on panicle with glowing crimson bracts and orchid-colored ovaries and flowers. \$4.00

**Billbergia Burkholtzi.** Tall, slender, erect green leaves. Rose bracts, lavender fls. \$2.00.

**B. distachia.** Long, reddish green lvs., spotted cream. Rose bracts, blue and green fls. 75c.

**B. Elvenia Slosson** (*Nutans* x *Alberti*). Tall plant with very attractive flowers in spring. It takes a lot of postage and its fine quality makes it cost \$3.00 each.

**B. nutans.** Mid-winter, beautiful inflorescence on small plants. Fine pot plants. 75c.

**B. pyramidalis.** Wide green lvs. Red fls. tipped violet, red bracts. \$2.00.

**B. Rubro-cyanea.** Most colorful foliage, red and green spotted cream. Green fls. edged blue. Crimson bracts. \$1.00.

**B. speciosa.** Green lvs., striped on back. Green fls., tipped blue. Rose bracts. \$2.00.

**B. Theodore L. Meade.** Green lvs. and large, beautiful inflorescence, continuous all year on new growths. \$1.50.

**B. thyrsoides.** Forms very large, wide open rosettes of leaves. It blooms in August with a large flat head of rosy flowers held erect on a stem covered with deep rose bracts. It is commonly known as Torch Billbergia, and is really worth having. \$3.00.

**B. thrysiflora** (pyramidalis x amoena). Finest hybrid. Beautiful inflorescence. \$1.50.

**B. Zebrina.** Lvs. banded white on back. Salmon bracts, green fls. \$1.50.

**Cryptbergia Meadi.** A bigeneric bromeliad hybrid of Billbergia and Cryptanthus. The flowers are very insignificant, but foliage is lovely, being of pinkish and bronzy tints especially when given plenty of light. Highly recommended for the window garden. \$1.00 ea.

**Cryptanthus Bromeloides, var. Tricolor.** One of the most colorful of the Cryptanthus. The leaves are variegated white and green, and in strong light it is stained pink and red, assuming a most charming color effect. The amount of color stain varies in direct proportion with the amount of light. \$2.50.

**Neoregelia spectabilis.** Called "Fingernail plant" because of the red tips of the metallic olive green leaves; gray crossbands beneath; blue flowers in low cushion. \$3.50.

**Big 4 collection.** Nutans, Distachia, Rubro-cyanea and Zebrina. Value \$3.50. Price \$3.25. We will send larger plants if you order them to come by express, f.o.b.

**Sansevieria Golden Hahni.** Just like Hahni in size and form but golden yellow in color with some green variegations. New and scarce. \$4.00 ea.

**Tillandsia ionantha.** A miniature plant of xerophytic habit. It is strictly an air plant and does not have to be planted except for convenience. In nature it grows on tree bark, rock or telegraph wire. The best method of handling is to plant in a very small pot of osmunda and set in full sunlight. Water the leaves occasionally. The two inch rough leaves are crowded together urn-shaped. When in flower the leaves turn red. The flowers are very large for the size of the plant, tubular in form and purple in color with yellow anthers at the tip. This is one of the finest plants we know of for a small sunny window garden. \$1.00 ea.

**Tillandsia lindeni.** Gracefully curved pointed leaves with maroon lines deepening towards the base. The flattened ten inch flower spike is light pink with large blue flowers emerging alternately from the sides. Very long lasting. Some consider this the finest of all bromeliads. \$7.50 ea.

**Quesnelia arvensis.** This is a terrestrial plant and should be grown in the ground or a sandy soil mixture with peat added, if potted. The leaves are large and spiny. The bloom is erect, a brilliant shade of pink in a large closely packed umbel. Should be grown in open sunlight. Rare. \$5.00.

**Q. liboniana.** Light green foliage that is rather stiff in form. The flowers are stunningly different, being a combination of deep orange and blackish purple. \$1.50 ea.

**Vriesia marie.** "Painted Feather," hybrid larger than carinata, light green foliage tinted pink and showy, flattened, featherlike spike with bracts salmon-rose at base, and yellow dotted brown toward apex; yellow flowers. \$7.00.

**V. carinata.** A small growing plant with about six-inch spread, plain green shiny leaves. Red, yellow and green colors on a fan-like structure on end of a ten-inch stem. The color lasts a long time. Summer blooming. \$7.50.

**V. splendens.** Flaming Sword. A beautiful green plant with mahogany stripes. Flower spike tall, flat, and brilliant orange. Spectacular. Rare. Plant does not sucker like other Bromeliads but makes new plant in its own center. Small \$5.00.